



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,245	08/31/2006	Kazuya Suzuki	Q96626	8154

23373 7590 12/23/2008
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT	PAPER NUMBER
----------	--------------

2419

MAIL DATE	DELIVERY MODE
-----------	---------------

12/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/591,245		SUZUKI ET AL.	
	Examiner		Art Unit	
	Andrew C. Lee		2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/31/2006</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. This Office Action in response to the Application filed on 8/31/2006 is entered.
Claims 1 – 8 are hence entered and presented for examination.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 8/31/2006 was filed, and the submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

3. Claim 1 – 8 are objected to because of the following informalities:

Regarding claim 1, the phrase “characterized by” in line 4 should be deleted and be replaced with “said method” or “the method”. Appropriate correction is required.

Regarding claims 2, 3, 4, 5, the claims have the same deficiencies as addressed in claim 1. Appropriate correction is required.

Regarding claim 5, the claimed subject matter “for each reception terminal” should be corrected as “for each of said plurality of reception terminals” in consistence with claim 1.

Regarding claim 6, the phrase “characterized by” in line 4 should be deleted and be replaced with “said apparatus” or “the apparatus”. Appropriate correction is required.

Regarding claims 7, 8, the claims have the same deficiencies as addressed in claim 6. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the reception terminal" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding the claimed subject matter "stream data of a packet" in line 5, it is not clear "a packet" is a different kind of packet, or a new packet, other than the multicast packet as disclosed in claim 1. Clarification is required.

Claim 6 recites the limitation "the reception terminal" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 – 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Maxemchuk et al. (US 6782490 B2).

Regarding claim 1, Maxemchuk et al. disclose a communication quality management method of multicasting data from a distribution server to a plurality of reception terminals via a router connected to a network (*element 102 “multicast source” interpreted as a distribution server, and elements 124A as a plurality of reception terminals; Abstract, Fig. 1, col. 4, lines 39 – 41*), characterized by comprising the steps of: adding quality information to a multicast packet distributed from the distribution server (*“uses the Real-Time Transport Protocol (RTP) to multicast the packets,... RTP provides timestamps and sequence number” interpreted as adding quality information; col. 7, lines 49 – 59*); acquiring the quality information from the multicast packet distributed via the router (*“through the multicast-enable router”; Fig. 2B, col. 10, lines 1 – 7*); and distributing, to the reception terminal, the multicast packet from which the quality information is removed (*col. 10, lines 3 – 21*).

Regarding claim 2, Maxemchuk et al. disclose adding the quality information as a quality information header in an IP header, UDP header, and stream data of a packet from the distribution server (*“uses the Real-Time Transport Protocol (RTP) to multicast the packets,... RTP provides timestamps and sequence number” interpreted as adding quality information as a quality information header; Fig. 2A, element 285, col. 7, lines 49 – 59*).

Regarding claim 3, Maxemchuk et al. disclose adding the quality information before a packet from the distribution server as an IP header, UDP header, and quality information header (*“uses the Real-Time Transport Protocol (RTP) to multicast the packets,... RTP provides timestamps and sequence number” interpreted as adding quality information as a quality information header; Fig. 2A, element 285, col. 7, lines 6 – 14, lines 49 – 59*).

Regarding claim 4, Maxemchuk et al. disclose containing packet loss information, distribution delay information, and fluctuation information in the quality information (*“the fraction of data packets from the source loststatistical variance of packet interarrival time ,,,.....round trip propagation delay”*; col. 3, lines 16 – 27, Fig. 9, Fig. 9A, Fig. 9B, Fig. 9C, Fig. 9D)

Regarding claim 5, Maxemchuk et al. disclose saving, as database for each reception terminal, quality information acquired from the multicast packet (*col. 10, lines 26 – 56*).

Regarding claim 6, Maxemchuk et al. disclose a communication quality management apparatus for multicasting data from a distribution server to a plurality of reception terminals via a router connected to a network (*element 102 “multicast source” interpreted as a distribution server, and elements 124A as a plurality of reception terminals; Abstract, Fig. 1, col. 4, lines 39 – 41*), characterized by comprising: a server

proxy arranged between the distribution server and the router to add quality information to a multicast packet (*"retransmit server"*; *Fig. 1, "uses the Real-Time Transport Protocol (RTP) to multicast the packets,... RTP provides timestamps and sequence number"* interpreted as adding quality information; *col. 7, lines 49 – 59, col. 8, lines 36 – 53*); a reception terminal proxy arranged between the router and the reception terminal and including a quality information acquisition unit which acquires, from the multicast packet, the quality information added by said server proxy and a quality information calculation/transmission unit, said reception terminal proxy distributing, to the reception terminal, the multicast packet from which the quality information is removed (*"repair server"*; (*Fig. 2B, col. 10, lines 1 – 7, 22 – 56*); and an accumulation server which receives and accumulates the quality information from said reception terminal proxy (*Abstract, Fig. 4, col. 14, lines 39 – 67*).

Regarding claim 7, Maxemchuk et al. disclose a quality information database storing, for each reception terminal, quality information acquired, calculated, and received by said accumulation server is connected to said accumulation server (*Abstract, Fig. 4, col. 14, lines 39 – 67*).

Regarding claim 8, Maxemchuk et al. discloses a quality management server which receives packet quality information from said accumulation server and sets QoS of the router is connected to said accumulation server (*"repair server"*; *Abstract, Fig. 4, col. 14, lines 39 – 67*).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2419
<12/14/2008:1Qy09>

/Edan Orgad/
Supervisory Patent Examiner, Art Unit 2419